

Title (en)
Variable area nozzle

Title (de)
Düse mit veränderlichem Querschnitt

Title (fr)
Tuyère à section variable

Publication
EP 1344928 A3 20050323 (EN)

Application
EP 03251019 A 20030220

Priority
GB 0205701 A 20020312

Abstract (en)
[origin: EP1344928A2] An exhaust nozzle assembly (18) for a gas turbine engine (10), the assembly (18) comprises a main axis (20), an inner nozzle (19), an outer nozzle (17), a translatable centre-body (44) and a means for translating the centre-body (49) between a forward position and a rearward position. The centre-body (44) is disposed radially inwardly of the inner nozzle (19) thereby partly defining an inner duct (35) for a core engine gas flow (28), an outer duct (17) for a bypass gas flow (30) is defined by the inner nozzle (19) and the outer nozzle (17). The outer nozzle (17) extends downstream of the inner nozzle (19) and with the centre-body (44) defines a final mixing duct (36) having a final exhaust exit area (38). When the centre-body (44) is in the forward position the final exhaust exit area (38) is at a maximum area, and when the centre-body (44) is in a rearward position the final exhaust exit area (38) is at a minimum area. <IMAGE> <IMAGE>

IPC 1-7
F02K 1/08

IPC 8 full level
F02K 1/08 (2006.01)

CPC (source: EP US)
F02K 1/08 (2013.01 - EP US)

Citation (search report)

- [X] BE 525244 A
- [X] FR 995131 A 19511128 - RATEAU SOC
- [X] FR 1373227 A 19640925 - BRISTOL SIDDELEY ENGINES LTD
- [X] US 5165227 A 19921124 - GRIEB HUBERT [DE]
- [X] US 5038559 A 19910813 - BLACKMORE WALTER L [US]
- [A] US 4244294 A 19810113 - FRIGNAC JEAN-PAUL, et al
- [A] US 2828603 A 19580401 - LAUCHER RICHARD G

Cited by
RU2504681C2; EP3597894A1; FR3070184A1; DE102010007665A1; DE102010007665B4; FR3070185A1; EP3447271A1; CN109424370A; US11053886B2; US10995702B2; US8453458B2; WO2007093760A1; WO2013012316A1

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